

CLAIMS

1. Method of health monitoring implementing a medical diagnosis established by a medically-qualified person (11) concerning a remotely-monitored patient, in particular at his home, and monitored via a communications network, characterized in that:
 - 5 - The medically-qualified person (11) associates medical data (2) with health actions (3) in a server (1) via monitoring rules,
 - The server (1) programs a distant terminal (9), located near the patient in such a way that the distant terminal (9) implements an automatism (5) applying the monitoring rules to the medical data provided to the terminal by at least one
 - 10 sensor (8) associated with the patient and/or by a man-machine interface of the distant terminal (13) and/or by a man-machine interface of a networked station (12) and/or by the network (7).
2. Method according to claim 1 characterized in that the medical data provided to the terminal by a sensor (8) that belongs to the patient and/or by a
- 15 man-machine interface of the distant terminal (13) and/or by a man-machine interface of a networked station (12) and/or by the network (7) are sent to the medically-qualified person via a communications network so that the latter takes into account this data sent in order to possibly modify the monitoring rules associating data and health actions at the level of the server.
- 20 3. Method according to any one of the previous claims characterized in that at least one sensor and/or a man-machine interface is integrated into the distant terminal.
4. Method according to any one of the previous claims characterized in that monitoring rules are added, modified or eliminated from the server via the
- 25 communications network manually or automatically.
5. Method according to any one of the previous claims characterized in that means are associated to the distant terminal in order to test its communication with the medically-qualified person and/or with a third party so as to ensure the transmission of alerts to this person and/or to this third party when the monitoring
- 30 rules are implemented.

6. Method according to any one of the previous claims characterized in that the sensor and/or man-machine interface (13) of the distant terminal and/or the man-machine interface of the networked station (12) and/or the network (7) sends data discontinuously to the terminal.
- 5 7. Method according to any one of the previous claims characterized in that different sensors are used to measure several pieces of medical data of distinct categories.
- 10 8. Method according to claim 7 characterized in that the sensors under consideration intend to measure data of at least one of the following categories: blood pressure, heart rhythm, body temperature, skin temperature, sodium content on the skin, kinetic and/or kinematic parameters of the body, blood dosage, analysis of urine and/or stool and/or blood gas, weight, electrocardiogram data, heart sounds, oxygen saturation, thermal image.
- 15 9. Method according to any one of the previous claims characterized in that a sensor includes a man-machine interface in order to provide medical data to the terminal via the interface such as: intensity of pain, state of fatigue, alterations in the state of consciousness, difficulties in speaking.
- 20 10. Method according to any one of the previous claims characterized in that means are associated to the man-machine interface of the distant terminal in order to intervene on the server (1).
- 25 11. Method according to any one of the previous claims characterised in that the data sent by the network (7) is relative to data such as results of biological examinations and/or functioning of a piece of equipment connected to the network, in particular home automation equipment for detecting presence, control of access, heating, lighting, openings, fire, flooding, mains cut-off and/or a medical device, relative to an alarm signal or any signal resulting from the transformation of measurements and coming from such a connected device, in particular a pump and/or administration set and/or respirator and/or fall detector or relative to information coming from third-party software, in particular from an expert system, likely to be executed on the terminal or on a machine connected to

the terminal, such as software for monitoring self-care haemodialysis and/or for monitoring glycaemia of diabetics and/or monitoring blood pressure.

12. Method according to any one of the previous claims characterized in that monitoring rules are made available to a medically-qualified person, so that 5 he may render these monitoring rules operative or inoperative.

13. Method according to any one of the previous claims characterized in that a user provides data to the distant terminal (9) via the network (7) using a piece of equipment that is distinct from said distant terminal, in particular using a 10 terminal that has wireless means of communication of the radiofrequency and/or infrared type.

14. Health monitoring station characterized in that it includes means so that a person (11) receives alerts (10) and/or consults the data server (1) via a man-machine interface (12) according to a method that conforms to one of the preceding claims.

15. Medical station characterized in that it includes means to that a medically-qualified person (11) programs, via a man-machine interface (12), a 15 distant terminal (9) according to a method that conforms to one of claims 1 to 13.

16. Health monitoring server aiming to make it possible to implement a 20 medical diagnosis established by a medically-qualified person (11) concerning a remotely-monitored patient, in particular at his home, and monitored by a communications network, characterized in that:

- The server includes means for the medically-qualified person (11) to associate medical data (2) with health actions (3) in a server (1) via monitoring rules,
- The server (1) includes means for programming a distant terminal (9), located 25 near the patient in such a way that the distant terminal (9) implements an automatism (5) applying the monitoring rules to the medical data provided to the terminal by at least one sensor (8) that belongs to the patient and/or by a man-machine interface of the distant terminal (13) and/or by a man-machine interface of a networked station (12) and/or by the network (7) according to a 30 method that conforms to one of claims 1 to 13.

17. Health monitoring terminal aiming to make it possible to implement a medical diagnosis established by a medically-qualified person (11) concerning a remotely-monitored patient, in particular at his home, and monitored by a communications network, characterized in that:

5 A server including means for the medically-qualified person (11) to associate medical data (2) with health actions (3) in a server (1) via monitoring rules, the terminal, located near the patient, includes means to be programmed by the server (1) in such a way that this distant terminal (9) implements an automatism (5) applying the monitoring rules to the medical data that is provided
10 to it by at least one sensor (8) that belongs to the patient and/or by a man-machine interface of the distant terminal (13) and/or by a man-machine interface of a networked station (12) and/or by the network (7) according to a method that conforms to one of claims 1 to 13.

15 18. Health monitoring system implementing the medical diagnosis; said system making it possible for users, in particular doctors, to remotely monitor patients, in particular patients maintained in the home; said system including:

 - a data server connected to a communications network, in particular of the Internet type,

20 a man-machine interface, in particular installed in computing equipment, connected to said data server via said communications network; said man-machine interface being implemented by the users to:

 - select and/or input, in said data server, medical data, in particular of the "vomiting" type,

25 - input and index health actions, in particular of the "hospitalisation" type, corresponding to said medical data,

 configure, using said selected medical data, the monitoring rules, presented in particular in the form of SQL queries of the "if symptoms = vomiting and temperature > 38.5°C, observation period = 24h health action = check urine" type; said monitoring rules being recorded and indexed with said health actions in said
30 data server.

said man-machine interface being furthermore implemented by said users to:

5 - input and send alert protocols to said data server, in particular information relative to the contact information of the person to inform in the event that a realised health action would be different from the corresponding monitoring rule;

said system furthermore including:

10 - means of analysis destined to analyse the compatibility of said protocols thus sent, in particular the compatibility over time between the new monitoring rules and the former monitoring rules.

said system furthermore including:

15 - a distant terminal, located with said patients, in particular with said patients that are maintained in the home; said distant terminal being connected to sensors, in particular to medical measuring devices, providing medical data to said distant terminal, and/or said distant terminal receiving said medical data from said users and/or said patients via a man-machine interface of said distant terminal;

20 said system furthermore including means of programming in order to program automatisms in said distant terminal, from said data server via said communications network; said automatisms being programmed using said medical data and said health actions indexed in said data server;

said distant terminal including means for activating said automatisms thus programmed in order to:

apply, periodically, said monitoring rules to said medical data provided to said distant terminal by generating health actions to be executed,

25 check the execution, by said users, of said health actions,

generate alerts in the event said health actions are not executed by said users;

in a way that the system thus makes it possible to compile a personalised diagnosis base for each patient and to generate the triggering of appropriate alerts.